



A.D. 1849 N° 12,612.

S P E C I F I C A T I O N

OF

MOSES POOLE.

DRAWING FLUIDS FROM THE HUMAN OR
ANIMAL BODY.

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Drawing Fluids from the Human or Animal Body.

POOLE'S SPECIFICATION.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, MOSES POOLE, of the Patent Office, London, Gentleman, send greeting.

WHEREAS Her present most Excellent Majesty Queen Victoria, by Her Royal Letters Patent under the Great Seal of the United Kingdom of Great Britain and Ireland, bearing date at Westminster, the Fifteenth day of May, One thousand eight hundred and forty-nine, in the twelfth year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Moses Poole, my exors, admors, and assigns, Her especial licence, full power, sole privilege and authority, that I, the said Moses Poole, my exors, admors, and assigns, or such others as I, the said Moses Poole, my exors, admors, or assigns, should at any time agree with, and no others, from time to time and at all times during the term of years therein expressed, should and lawfully might make, use, exercise, and vend, within England, Wales, and the Town of Berwick-upon-Tweed, the Invention of "**IMPROVEMENTS IN APPARATUS FOR DRAWING FLUIDS FROM THE HUMAN OR ANIMAL BODY,**" communicated to me from abroad; in which said Letters Patent is contained a proviso that I, the said Moses Poole, should cause a particular description of the nature of the said Invention, and in what manner the same is to be performed, by an instrument in writing under my hand and seal, to be inrolled in Her said Majesty's High Court of Chancery within six calendar months next and immediately after the date of the said in part recited Letters Patent, as in and by the same, reference being thereunto had, will more fully and at large appear.

NOW KNOW YE, that in compliance with the said proviso, I, the said Moses Poole, do hereby declare that the nature of the said Invention, and

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the manner in which the same is to be performed, are fully described and ascertained in and by the following statement thereof, reference being had to the Drawings hereunto annexed, and to the figures and letters marked thereon, that is to say:—

The Invention consists,—

5

First, of improvements in apparatus for scarifying parts of the human or animal body for the purpose of drawing blood. And,

Secondly, the Invention consists of improvements in apparatus for obtaining partial vacuum, for the purposes of facilitating the drawing blood or fluid from the surface, and for drawing milk. And, in order that the Invention may be 10 fully understood and readily carried into effect, I will proceed to describe the Drawings hereunto annexed, in the various Figures of which the same letters are used to indicate the same parts.

DESCRIPTION OF THE DRAWINGS.

Figure 1 shows two views of a scarifying instrument according to the 15 Invention, and the peculiarities are that the cutter is tubular, and is caused to cut by rotation about an axis. Figure 2 shows the two parts of the case. Figure 3 shows the axis within which the tubular cutter is fixed, having the pulley fixed thereon, by which rotation is given to the cutter. Figure 4 shows the hollow axis without the pulley, but having the cutter fixed therein by a screw, 20 by which means the depth of cut or puncture may be regulated, only that portion of the cutter which protrudes below the instrument cutting. Figure 5 shows the tubular axis separately, and Figure 6 shows the cutter separately. *a* is the cutter. *b*, the axis. *c*, the screw which retains the cutter in any desired position. *d* is the pulley, with a cord fixed thereon, in order to give rotatory 25 motion to the axis *b* and cutter carried thereby, the ends of such cord passing through the holes in the case, as shown in Figure 1. *e* is the lower part of the case of the instrument; and *f* is the upper part of the case of the instrument, and these two parts are combined by screws, as shewn. In using this apparatus the end of the instrument *e* is placed against the part of the 30 body which is to be punctured, and then by pulling the cord the cutter will be caused to rotate and make a circular or ring cut of equal depth all round.

Figure 7 shows a similar apparatus, provided with a guage plate or adjusting cap *g*, which screws into the part *e* of the case, and according as such gauge plate is screwed more or less up so will be the quantity the end of 35 the cutter will protrude, and consequently the depth of cut which will be made by the cutter. This mode of adjusting the depth of cut is considered better than the screw *c*, but either may be used or other means resorted to

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for adjusting the depth of cut. In some cases where a larger diameter of cut is desirable, then it is preferred not to make a complete ring or circle, for which purpose, although a cylindrical cutter be employed, the cutting may be prevented at particular points by pressing the surface of the body out of the way of the rotating cutter..

Figure 8 shows another instrument of a larger kind; Figure 9 shows a section thereof; Figure 10, plan; and Figure 11, is a cap for the instrument when not in use. This cap is also used in winding up the cord. In order to apply the cap the guage plate is removed.

Figure 12 shows a diagram of the cut made by this instrument. *a* is the cutter; *b* is a fixed axis. The cutter *a* is fixed to the pulley *d*, to which the strap is affixed for giving rotatory motion to the cutter *a*; and in order to prevent its cutting all round, a cylinder *h* is fixed to the axis, such cylinder *h* having several projections *i, i*, which preceding the cutter presses the surfaces down and prevent the cutter acting on those points. I would remark, in respect to this the first part of the Invention, that the details may be varied so long as a ring or circular or part or parts of a ring or circular cut be made.

I will now describe the second part of the Invention.

Figure 13 shows an instrument arranged according to this part of the Invention; Figure 14 shows the glass tube or cylinder separately; and Figure 16 shows the parts employed for moving the piston. In respect to this part of the Invention, I would state that various instruments have before been employed for obtaining a partial vacuum for facilitating the drawing of milk from the human breast, and also for drawing blood from the surface of the body when the same has been punctured. And amongst other instruments, glass cylinders, having pistons therein, have been employed, but such instruments have been objectionable in consequence of the great effort required in moving of the piston, when the hand of the user has to move through the same space as the piston. Now the peculiar character of this part of the Invention is the use of mechanical power to aid the hand of the user, so that only a comparatively small effort moving through a much more extended space than the piston is required to be exerted by the person's hand when using the instrument. *j* is a cylinder of glass. *k* is a cap or cover. *l* is a screw, on the lower end of which a cork or other piston is fixed between the plates *m* and *n*, one of which is capable of moving on the screw *l*, so as to confine the piston between the plates *m* and *n*. The piston being within the cylinder, it is caused to rise therein by means of the screw nut or handle *o*, which, resting on the cap *k*, when being turned round causes the screw *l* and

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the piston to rise up within the cylinder, the person operating being able to judge of the effect by seeing through the glass cylinder. This instrument is to be placed over the part of the body which has been punctured by the instrument Figure 1.

Figure 17 shows a similar instrument for drawing milk. 5

Figure 18 shows another similar instrument to that at Figure 13, but on a larger scale, and suitable when several cuts have been made, and when the parts (where such several cuts have been made) are such that they would be pressed into the glass, then I employ a glass with a diaphragm such as is shewn in Figure 19, in order that the parts which have been scarified should 10 alone be pressed towards the glass.

Having thus explained the nature of the Invention, and the manner in which the same is to be performed, I would have it understood that I do not claim any of the mechanical parts separately, and the same may be varied in each of the instruments so long as the peculiar character of any part of the Invention 15 be retained.

But what I claim is,—

First, the improvements in apparatus herein described for scarifying the human or animal body, in order to draw blood therefrom. And,

Secondly, I claim the improvements herein described for obtaining a partial 20 vacuum to facilitate the drawing blood or fluid from the surface, and for drawing milk.

In witness whereof, I, the said Moses Poole, have hereunto set my hand and seal, this Fourteenth day of November, in the year of our Lord One thousand eight hundred and forty-nine. 25

MOSES (L.S.) POOLE.

AND BE IT REMEMBERED, that on the Fourteenth day of November, in the year of our Lord 1849, the aforesaid Moses Poole came before our said Lady the Queen in Her Chancery, and acknowledged the Specification aforesaid, and all and every thing therein contained and specified, in form 30 above written. And also the Specification aforesaid was stamped according to the tenor of the Statute made for that purpose.

Enrolled the Fourteenth day of November, in the year of our Lord One thousand eight hundred and forty-nine.

CROSBY.

LONDON:

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Printers to the Queen's most Excellent Majesty. 1857.

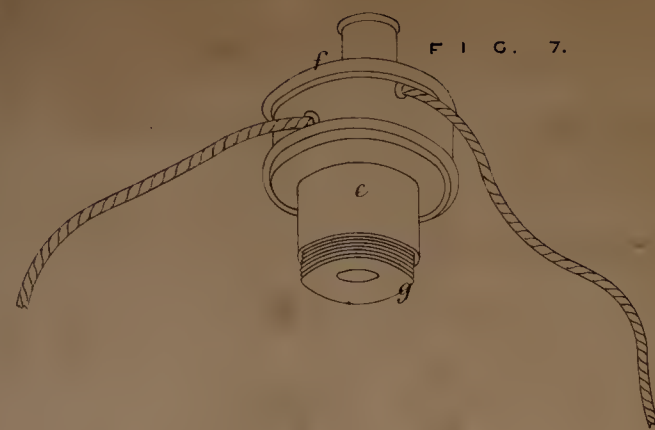


FIG. 10.

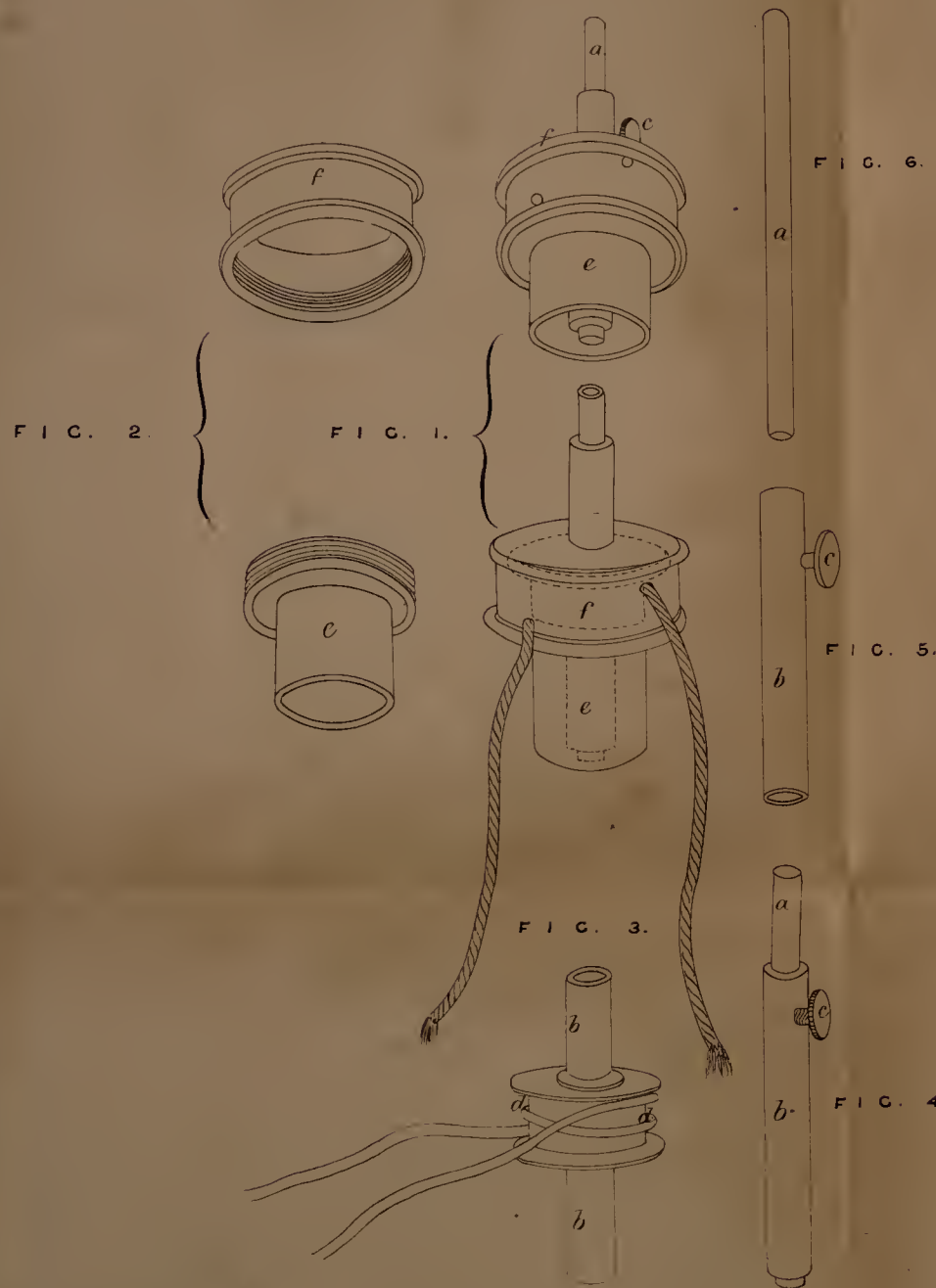


FIG. 8.

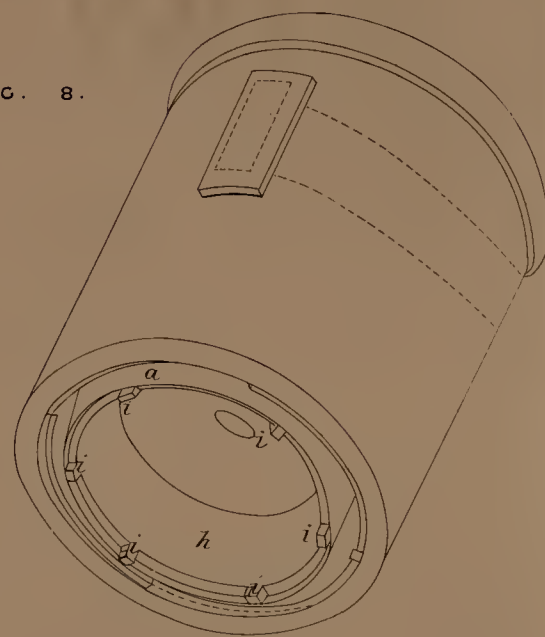


FIG. 11.

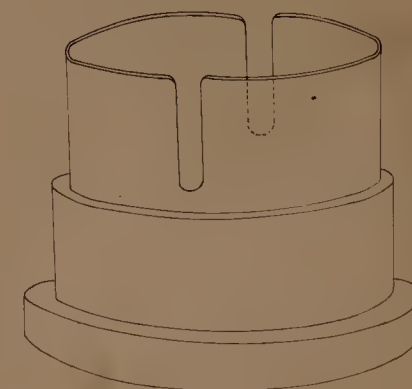
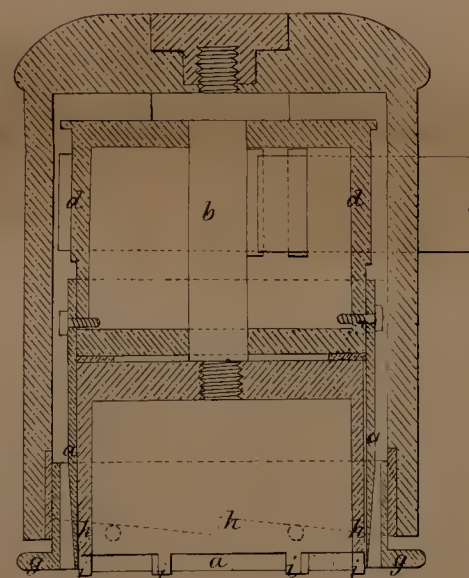


FIG. 9.



Regulating Cap or gauge plate (g) to be used with the instrument Fig. 8. there being inclines on the interior of the case of that instrument up which the studs (g) move to obtain the desired adjustment

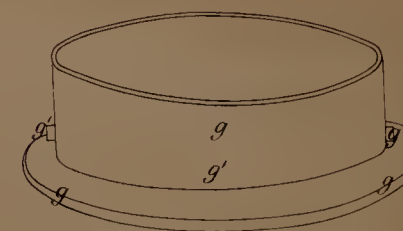


FIG. 19.

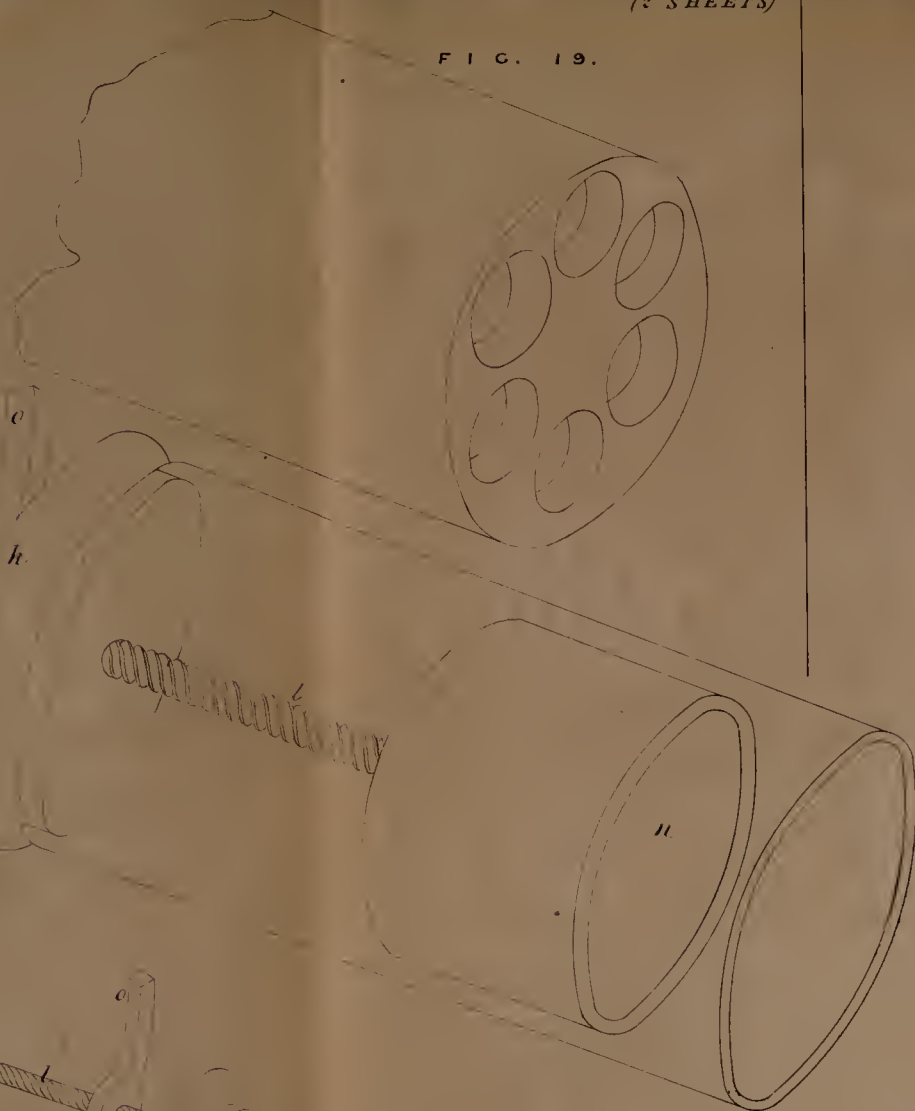


FIG. 18.

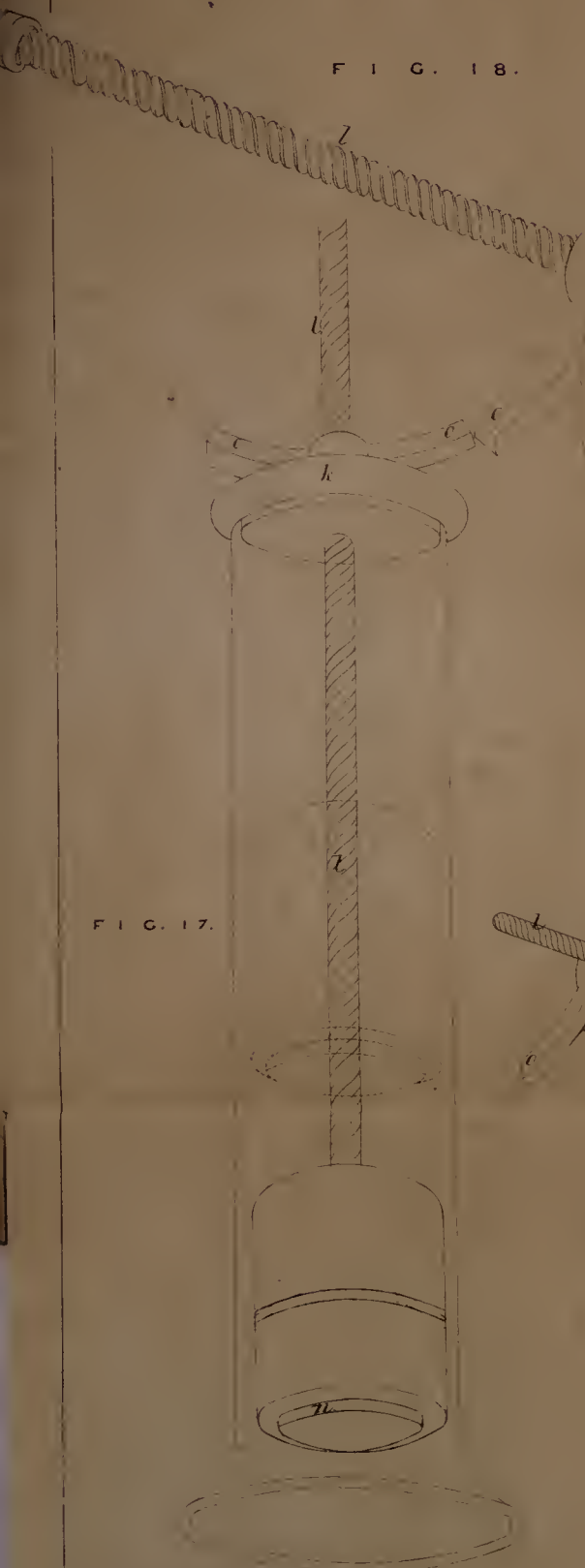


FIG. 17.

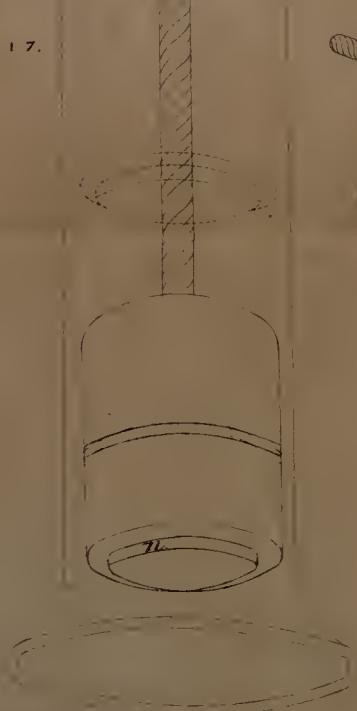


FIG. 16.

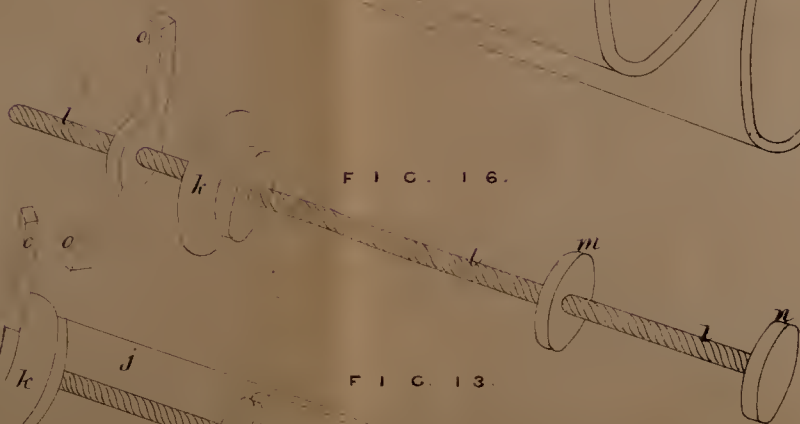


FIG. 13.

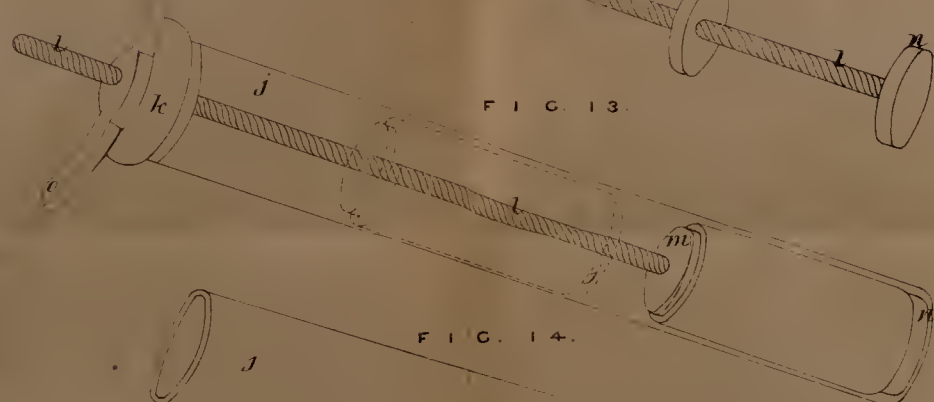
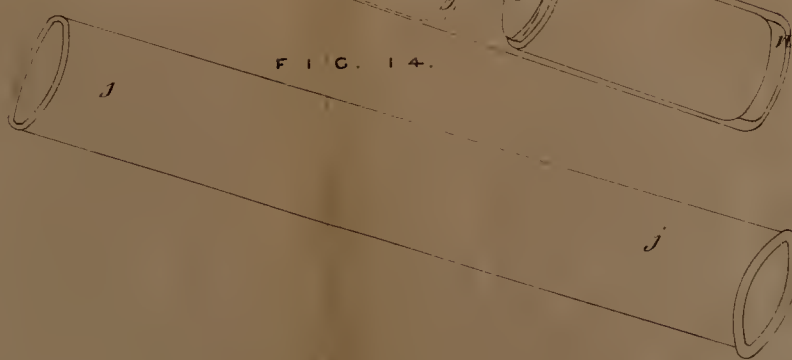


FIG. 14.



The encolled drawing is colored

Drawn on Stone by Malby & Sons.

